

REMARKS

Status of the claims

With the above amendments, claim 28 and 34-43 have been canceled and claims 25, 26, 30, 32 and 33 are amended. Claims 25-27 and 29-33 are pending and ready for further action on the merits. No new matter has been added by way of the above amendments. Reconsideration is respectfully requested in light of the following remarks.

Rejections under 35 USC §112, first paragraph

Claims 34-43 are rejected under 35 USC §112, first paragraph as allegedly lacking description.

Claims 34-43 are rejected under 35 USC §112, first paragraph as allegedly not being enabled.

Applicants traverse.

Applicants have canceled claims 34-43 so the rejection is moot. Withdrawal of the rejection is warranted and respectfully requested.

Rejections under 35 USC §112, second paragraph

Claims 25-43 are rejected under 35 USC §112, second paragraph, as allegedly being indefinite.

Applicants have canceled claims 28 and 34-43 so the rejection is moot with respect to those claims. Withdrawal of the rejection is warranted and respectfully requested with respect to claims 28 and 34-43.

With respect to claims 25-27 and 29-33, Applicants traverse. The Examiner asserts that it is unknown what enzymological properties are encompassed by the claims. Claim 25 claims an optimal pH at which the amylase enzyme works as well as functional language directed to what substrate the enzyme will cleave. Applicants do not believe that there is anything vague or indefinite about these enzymological properties as they are recited in the claim. In other words, the "enzymological properties" are defined in the claim. Applicants believe that with this explanation, that the claim can no longer be considered vague or indefinite. Withdrawal of the rejection is warranted and respectfully requested.

Further, the Examiner asserts that a sequence cannot have functional properties. Applicants have amended the claims so that the sequence no longer has the functional properties but

rather the protein encoded by the sequence has these properties. Applicants believe that with this amendment that the rejection has been obviated.

The Examiner also asserts that is unknown what is meant by "(G1)" "(G2)" etc. Applicants note that this is simply shorthand notation for the molecules where these symbols occur, which is well known in the art. However, in an effort to expedite prosecution, these symbols have been canceled. Thus, the rejection is moot. Withdrawal of the rejection is warranted and respectfully requested.

The Examiner rejects claim 26 for the presence of "a DNA" in claim 26. Applicants have amended claim 26 in a way that Applicants believe make this claim unambiguous. Applicants believe that with this amendment that the rejection has been obviated. Withdrawal of the rejection is warranted and respectfully requested.

The Examiner also asserts that claim 28 is a duplicate of claim 26 because claim 26 must be recombinant. Applicants have canceled claim 28 so the rejection is moot. Withdrawal of the rejection is warranted and respectfully requested.

Claim 30 is rejected for reciting what the Examiner asserts are conflicting properties regarding stability and activity and

for reciting a molecular weight less than 50 kD. Applicants have amended claim 30 so that it no longer recites any conflicting properties. Moreover, Applicants assert that because the method of determining molecular weight is by polyacrylamide gel electrophoresis, there is some error inherently present in the method that would allow one to potentially deduce a molecular weight of less than 50,000 daltons. For example, Applicants note that a molecular weight of a given protein may vary when measured by polyacrylamide gel electrophoresis depending on how spherical the protein is as well as its pI. For these reasons, Applicants submit that there is nothing vague or indefinite about this claim. Withdrawal of the rejection is warranted and respectfully requested.

The Examiner rejects claim 33 for reciting SEQ ID NO: 3 twice. Applicants have amended claim 33 so that it no longer recites SEQ ID NO: 3 twice. Applicants believe that with this amendment that the rejection has been obviated. Withdrawal of the rejection is warranted and respectfully requested.

Regarding claim 35, the Examiner asserts that "member" renders the claim indefinite. Applicants disagree. Nevertheless, claim 35 has been canceled so the rejection is

moot. Withdrawal of the rejection is warranted and respectfully requested.

With the above remarks and amendments, Applicants believe that the claims, as they now stand, define patentable subject matter such that passage of the instant invention to allowance is warranted. A Notice to that effect is earnestly solicited.

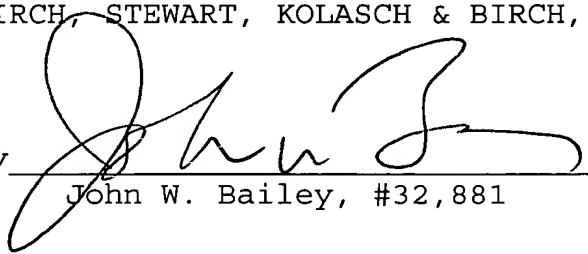
If any questions remain regarding the above matters, please contact the undersigned in the Washington metropolitan area at the phone number listed below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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By


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